

IN THE SEQUENCE LISTING

Please replace the Sequence Listing with the substitute Sequence Listing submitted herewith.

*Placed before
also.*

IN THE CLAIMS

Please amend claims 31-33, and add new claims 34-47 as follows:

31. (Amended) A synthetic peptide comprising a regulatory virus protein R (Vpr) of the human immunodeficiency virus type 1 (HIV-1) (SEQ ID NO: 1).

Subc 1
32. (Amended) A fragment of the synthetic peptide of claim 1, consisting of a peptide selected from the group consisting of:

(a) a 20 amino acid Vpr protein (sVpr^{1-20} or sVpr^{21-40} ; SEQ ID NO: 8 and 9, respectively);

(b) a 47 amino acid N-terminal peptide (sVpr^{1-47});

(c) a 49 amino acid long C-terminal peptide (sVpr^{48-96}); or

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(d) a fragment of at least 15 amino acids of any one of (a)-(c).

33. (Amended) The synthetic peptide fragment of claim 32, wherein the fragment consists of:

(a) sVpr^{11-25} (SEQ ID NO: 4);

(b) sVpr^{41-55} (SEQ ID NO: 5);

(c) sVpr^{46-60} (SEQ ID NO: 6); or

(d) sVpr^{56-70} (SEQ ID NO: 7).

34. (New) The synthetic peptide of claim 31 bound to a second molecule, wherein the second molecule comprises a DNA or protein molecule.

35. (New) The synthetic peptide fragment of claim 32 bound to a second molecule, wherein the second molecule comprises a DNA or protein molecule.

36. (New) A pharmaceutical composition comprising the synthetic peptide of claim 31 and a pharmaceutically acceptable carrier.

37. (New) A pharmaceutical composition comprising the synthetic peptide fragment of claim 32 and a pharmaceutically acceptable carrier.

38. (New) A pharmaceutical composition comprising the synthetic peptide of claim 34 and a pharmaceutically acceptable carrier.

39. (New) A pharmaceutical composition comprising the synthetic peptide fragment of claim 35 and a pharmaceutically acceptable carrier.

40. (New) A method of producing synthetic peptides derived from the regulatory virus protein R (Vpr) of HIV-1, the method comprising:

(a) synthesizing C-terminal Vpr peptides on a serine resin; and

(b) synthesizing N-terminal Vpr peptides on a polystyrene polyoxyethylene resin;

wherein chain elongation of the peptides is performed using fluoromethyloxycarbonyl (Fmoc) protection.

41. (New) The method of claim 40, further comprising:

(c) cleaving protection groups using a cleavage mixture comprising 95% trifluoroacetic acid (TFA), 3% triisopropylsilane and 2-5% ethyandithiol.

42. (New) The method of claim 40, further comprising purifying the peptides by HPLC on a column of silica gel using a linear gradient of TFA and water in acetonitrile.